



CALTECH/MIT VOTING TECHNOLOGY PROJECT

A multi-disciplinary, collaborative project of
the California Institute of Technology – Pasadena, California 91125 and
the Massachusetts Institute of Technology – Cambridge, Massachusetts 02139

TITLE Voter Attitudes Toward Poll Workers in the 2008 Election

Name Thad E. Hall
University University of Utah

Key words:

VTP WORKING PAPER #77
April 2009

Voter Attitudes Toward Poll Workers in the 2008 Election

Thad Hall, Assistant Professor of Political Science
Research Fellow, Institute of Public and International Affairs
University of Utah

This paper uses data from the *2008 Survey of the Performance of American Elections*, which was funded by The Pew Charitable Trusts/Jeht Foundation *Make Voting Work* Initiative. I am grateful to Charles Stewart for involving me in this project and for making the data available.

At a conference on election reform held by the National Academies of Science in 2004, Indiana's Secretary of State, Todd Rokita, referred to poll workers as "the street level lawyers" of elections. The reason for his statement was obvious: poll workers, in polling places, are the people who determine how well an election is run and have the power over its implementation (Alvarez and Hall 2006; Claassen, Magleby, Monson, and Patterson 2008; Hall, Monson, and Patterson, forthcoming). Because elections are held on a single day in a single window of time, poll workers often are the final arbiters of the electoral process because only with difficulty can voters appeal the decision of a poll worker on election day. Given the critical role of elections in allowing voters to express their preferences for candidates and government policy, poll workers play a critical role in politics and are key front-line, albeit largely volunteer, public administrators.

Even with the election seemingly endless concerns about election reform since the 2000 election debacle and the fact that poll workers are critical volunteers in the implementation of elections, until recently little attention was paid to them by either political scientists or public administrators. Prior to 2006, there were no systematic efforts to collect data about poll workers. This failure has been a glaring hole in understanding election administration because media discussions about poll workers strongly suggest that they are the critical, and often weak, link in effective election administration. As some scholars have noted (Claassen, Magleby, Monson, and Patterson 2008; Hall, Monson and Patterson forthcoming) have noted, poll workers are the street level bureaucrats of elections and their performance is often evaluated like those of other street level bureaucrats. For example, in the past poll workers have either implemented or enforced egregious forms of election disenfranchisement such as

literacy tests and poll taxes. More recently, studies have found that poll workers have implemented simple rules in ways that disadvantaged poor or ethnic minority voters, such as asking minority voter for identification more often than white voters (Atkeson et al 2007; Barreto, Marks and Woods 2004). Poll workers have given the wrong ballots to voters in elections (Sacramento Bee 2004), not known how to use and issue provisional ballots and have not been able to function efficiently, which can lead to long lines (Cobb and Hedges 2004). The combinations of discretion, interactions, and behaviors make poll workers fit well into the larger literature on street level bureaucracies (Lipsky 1980; Prottas 1978, 1979).

Poll workers are also important because there is very strong evidence that the quality of the interaction between the voter and the poll worker in the polling place determines whether the voters perceive the election process as fair and whether they have confidence that their ballots are counted accurately (Atkeson and Saunders 2007; Hall, Monson, and Patterson forthcoming). If a voter feels as though they have had a positive interaction with the poll worker, they are more likely to be very confident that her ballot was counted accurately. Considering the importance of the poll worker in the election process—where they are the sole guardians of the ballot in their precinct—this finding is both intuitive and important.

Although this recent research has illustrated the importance of poll workers in the electoral process, with the exception of a small number of articles, there has been little consideration given to how various demographic, election experience, partisan, and representativeness characteristics affect voters' perceptions of poll worker-voter interaction experience (Claassen, Magleby, Monson, and Patterson 2008; Hall, Monson, and Patterson 2007, Forthcoming). Different types of voters may perceive poll workers differently based on

their own socio-demographic characteristics or their own political characteristics. Voters may also perceive poll workers differently based on the characteristics of the poll worker, especially the race and age of the poll worker. There may also be a interactive effect—a descriptive representation one—where voters perceive poll workers who look like them as being better than they do poll workers who look different. Given the concerns that exist in the academic literature about the benefits of a representative bureaucracy (e.g., Selden 1997), these interactive effects are important to consider.

Voters may also just experiential and judge poll workers based on the experience that they have. Here, we would expect problems at the polls—such as long lines, registration, or equipment problems—as well as the mode of voting, early versus election day, to affect this (Claassen, Magleby, Monson, and Patterson 2008). Early voting may attract different types of poll workers—as well as voters—and voters may have a different experience than is the case on election day. In this analysis, we consider early and election day voting separately so that we can determine the differences between the two in regards to voter experiences with poll workers.

Previous Research on Poll Workers

The previous work on poll workers has been based primarily on exit poll data from election day voting and has focused on (1) the factors that make poll workers confident in their work and (2) how voter confidence in the voting process is affected by the quality of the voter-poll worker interaction (Hall, Monson, and Patterson 2007, forthcoming). In the first case, we know that poll workers who are well trained have a better experience on election day and provide voters with a better experience. Differences in training across jurisdictions can be great, based on the

results of post-election surveys of poll workers that have been conducted. As to the second point, research has shown that voters who have an excellent experience with their poll worker are much more confident that their vote was counted accurately in the election and are more confident that the election was conducted fairly. These data, from the 2006 mid-term elections, also showed that voters who are Republicans were more confident in the process than were Democrats.

However, we know less about what leads voters to rate their poll worker-voter interaction highly. Claassen, Magleby, Monson, and Patterson (2008) used exit poll data from two counties in Ohio to examine this question. They found that one demographic characteristic of the voter, age, and several election day experiential factors—long lines, knowing the poll worker, and having trouble finding the polls—all affected voter evaluations of the poll worker. They also found mixed results for several factors, such as having difficulty finding the polling place and a voting having their identification checked.

Given the importance of the voter-poll worker interaction on the voter's experience, it is important to learn more about the factors that shape this interaction. Although there are many reported problems regarding the voting process—voter registration problems, long lines, problems with voting machines—one the one study has considered how such problems affect poll worker evaluations. On the one hand, voters might blame the poll workers for the problems. However, if the voter has their problem solved, then the poll worker evaluation might positively benefit from the problem solving efforts. Again, determining the relationship between problems and poll worker evaluations is important for improving election administration and public confidence in the process.

There is also an important developing literature on the role that poll workers play in implementing election law. Theoretically, there are obvious principal-agency issues in election administration (Alvarez and Hall 2005). In practice, these issues do play out, as has been seen in the debate over voter identification, where poll workers have been shown to implement voter identification laws incorrectly and with bias (e.g., Alvarez et al. 2008). In New Mexico, males and Hispanics were asked to show identification more than were Whites and women and this was true regardless of the race of the poll worker. Likewise, there is a large media archive of cases where poll worker errors have caused problems in elections.¹

The problems with implementation of voter identification bring us to the issue of representativeness, which has also been understudied in regards to poll workers. Representative bureaucracy has been an issue of interest since World War II, with calls for making the bureaucracy more descriptively similar to the population as a whole, recognizing that society would view such a bureaucracy more positively (Levitan 1946). As Selden (1997, 35) notes, “Representative bureaucracy suggests that a bureaucracy that broadly reflects the interests, opinions, needs, desires, and values of the general public has legitimate authority in the policy process” (see also Sowa and Selden 2003). The representation issue has not been evaluated in the studies of poll workers that have been done previously.

As several scholars have noted, poll workers do play a key role in the election policy process based on the way that they interpret law and interact with poll workers (e.g., Alvarez, Atkeson, and Hall 2007; Atkeson, Alvarez, Bryant, Hall, and Saunders 2007; Alvarez and Hall 2006; Hall, Monson, and Patterson 2007; Forthcoming). In addition, there is a history in

¹ See <http://electionupdates.caltech.edu> for an archive of these types of stories.

election administration of one race systematically discriminating against others, with African Americans, Asians, and Latinos suffering from discrimination at the hands of Whites.² For this reason alone, descriptive representation may be important for confidence in the electoral process.

There are also reasons to suspect partisans and those who vote for winning candidates may evaluate the election—including the voting experience—differently than those who vote for losing candidates or who are independent voters. Research on voter confidence (Alvarez, Hall, and Llewellyn 2007, 2008, 2009; Hall, Monson, and Patterson forthcoming) have found such an effect, with winners tending to be more confident than losers and Democrats prior to 2008 being less confident than Republicans. If voters are merely projecting their evaluation of the election onto the poll workers, we would expect this partisan effect to remain. If, however, the voter evaluation of the poll worker is distinct from the evaluation of the election outcome itself, we would expect a different result.

Finally, research on voting experiences has focused primarily on the election day voting experience (Claassen, Magleby, Monson, and Patterson 2008; Hall, Monson, and Patterson 2007; forthcoming). The early voting experience has largely been ignored in these evaluations. In this study, we examine the early voting experience as well as the election day experience to identify differences between the two. Given that we know that there are differences in who votes early and on election day—and media reports suggest that there are experiential differences between the two—we may expect differences to exist in the evaluation of poll workers between the early and election day voters.

² For a systematic analysis of this discrimination, see Alexander Keyssar, 2000, *The Right to Vote*. New York: Basic Books.

Data and Analysis

The data in this analysis come from the *2008 Survey of the Performance of American Elections*, which was the first nationwide effort to gauge the quality of the election experience from the perspective of voters. The study used an Internet survey of 10,000 registered voters nationwide, 200 in each state, to ask gather information regarding topics such as whether they encountered problems with their voter registration or experienced long lines to vote. The funding for this study came from The Pew Charitable Trusts/Jeht Foundation *Make Voting Work Initiative*.

Based on the data in the study, we find that in the 2008 general election, 63% of voters voted in person on Election Day, 18% voted in-person early (or in-person absentee), and 19% voted by mail. There is variation in how these statistics work by state; for example, in New Mexico, Nevada, Texas, Tennessee, North Carolina, and Georgia, early voting was the most common way of voting but in thirteen states, more than 90% of the votes were cast on Election Day. In this analysis, we focus solely on the in-person voting methods and exclude the absentee voters.

Across the various modes of voting there are small but important differences in who votes by each method. For example, women were slightly less likely to vote in-person on Election Day and African Americans were more likely to vote early compared. More respondents who said they voted for Obama also reported that they voted early compared to McCain voters. Similarly, 21% of Democrats, compared to 17% of Republicans, said they voted early. On election day, 66% of McCain voters cast ballots compared to 60% of Obama's.

We have information on the age and race of poll workers based on estimates given by respondents. When we consider race, we find that—overall—there are similar percentages of White and Black voters and poll workers nationally. Hispanics are under-represented as poll workers compared to their percentage of the electorate. The data on poll worker age clearly suggests that the urban myth of the 72-year-old poll worker is not true. A total of 88% of poll workers are between 31 and 70 years old, with 57% between 51 and 70. Fewer than 6% were thought to be over 70 years old.

Poll Workers and the Voting Experience

In the survey, voters were asked, “Please rate the job performance of the poll workers at the polling place where you voted” and were given the choices “excellent,” “good,” “fair,” and “poor.” We examine this question for early voters and in-person election day voters separately to determine if there are differences in experiences by vote mode.

Voter Attributes

Table 1 shows the results to this question based on the demographic attributes of voters. Here, we see that there is a statistically significant difference between the experience that Black and White voters had voting in both early and absentee voting. African American voters were just over 10 percentage points less likely to rate their poll worker performance as excellent compared to White voters; other non-White voters also rated poll workers much lower than did African American Voters.³ This finding suggests that, for some reason, White voters and Black

³ This finding also illustrates the difference between poll worker evaluations and voter confidence; African Americans were more confident than White voters that their ballots were counted accurately in the 2008 election.

voters are expressing differences in their poll worker experiences in both election day and early voting.

[Table 1 about here]

When we examine the differences in poll worker evaluations based on the age of the voter, we see that—for both early and election day voting—only around 59% of young voters (18-30 years-old) rated their poll worker performance as excellent, compared to approximately 75% of those 51-70 years-old and 80% of those 70 and older. These data suggest that voters who have more experience are likely to rate their poll worker as excellent compared to those who are younger, given the statistically significant differences between their evaluations. This becomes especially apparent when we look at the evaluation of poll workers by first-time voters. First-time voters who voted on election day were 16 percentage points less likely to rate their poll worker as excellent compared to those who had voted before. The differences between poll worker evaluations between first-time and experienced voters in early voting is 6 percentage points, which is not quite statistically significant at the 0.10 level.

Poll Worker Attributes

In Table 2, we examine poll worker evaluations based on the demographics of the poll worker. Here, there is a stark difference between the early voting experience and the election day experience. In election day voting, the race of the poll worker affects the poll worker evaluation, with African American poll workers almost 7 percentage points less likely to be rated excellent compared to White poll workers. In early voting, the difference between White and African American poll workers is only around 2 percentage points. In early voting, there is also not a strong difference in evaluations of poll workers based on a poll worker's estimated

age. Here, the youngest poll workers were most likely to be rated the best and the oldest poll workers were rated the lowest. In election day voting, the differences are statistically significant, with poll workers 70 years old and older rated the lowest and those under 30 years old were the second lowest rated of the four age categories.

[Table 2 about here]

The one characteristic that boosts voter evaluations is whether the voter knows the poll worker. Interestingly, voters only claimed to have known their poll worker 19.4% of the time in election day voting and only 9.0% of the time in early voting. This is likely lower than many people would guess. However, for these voters it is a big boost to their voter evaluation. In election day voting, knowing the poll worker makes a voter almost 18 percentage points more likely to rate the poll worker excellent compared to not knowing the poll worker. For early voting, this gap is almost 17 percentage points. Familiarity seems to breed higher evaluations.

Representative Attributes

The research on representative bureaucracies suggests that there could be differences in poll worker evaluations based on the interaction between the voter's race and the poll worker's race. Specifically, White voters might evaluate White poll workers better than they might evaluate African American poll workers and African American voters might evaluate African American poll workers better than they might evaluate White poll workers. In fact, we see this is the case in Table 3. On election day, African American voters rated African American poll workers excellent 18 percentage points more than they did White poll workers. Likewise, White voters did the same for White poll workers, by 11 percentage points. In early voting, by contrast, the differences between same-race and cross-race poll worker evaluations were much

smaller. For White voters, the evaluations were almost the same for White and African American poll workers; for African American voters, the percent of excellent ratings was 6 percentage points higher if the poll worker was African American instead of White.

[Table 3 about here]

If we do the same type of evaluation by age, we see similarly interesting experiences between early and election day voting. For early voting, there were not large differences in the evaluations of poll workers based on the age of the voter and the age of the poll worker. Young voters and older voters tended to all rate poll workers similarly across the poll worker age groups. In almost all cases in early voting, the youngest poll workers were rated highest and the oldest poll workers were rated lowest by each of the four voter age groups. In election day voting, by contrast, there are differences in how each voter age group evaluated poll workers by age. The younger voters rated younger poll workers more similar to other aged poll workers than did the older voters. Similarly, older voters gave older poll workers better ratings in comparison to other aged poll workers than did younger voters.

Election Day Experiences

In Table 4, we consider the effects of election day experiences on voter evaluations of poll workers. We see that waiting in a long line dramatically reduced the likelihood that a poll worker would be rated excellent, regardless of whether the lines occurred in early or election day voting. People who stood in a long line were also among the most likely to rate poll workers “poor” or “fair” in the analysis. The people who were the most likely to rate poll workers fair or poor were those poll workers who had a problem on election day. A voter who had a problem at the polls—defined as a voter who (1) had a difficult or very difficult time

finding their polling place, (2) had a voter registration problem, (3) had a problem with their voting equipment, or (4) felt intimidated at the polls—were quite likely to rate their poll worker fair or poor, especially compared to all other factors. These voters also gave very low excellent ratings compared to the other factors in the previous tables. Voters could legitimately think that the poll workers had failed in some way to perform as they were supposed to—not putting up a sign to show the polling place location, did not set up the voting equipment correctly—and blamed the poll worker for it. Voters who required help voting gave poll workers excellent ratings at a slightly higher rate compared to those who did not need help, suggesting that getting help is appreciated by the voters who need it.

[Table 4 about here]

Table 5 shows poll worker evaluations based on party affiliation, ideology, and vote choice in the election. We see here that voter evaluations of poll workers is not affected by ideology, party affiliation, or vote choice except for voters who voted for third-party candidates. These voters tend to rate poll workers lower than do Democrats or Republicans, which may be the result of the fact that poll workers in many states are partisans. In general, however, it can be viewed as positive that voters do not see the poll worker process as partisan, as evaluated through the poll worker evaluations.

Multivariate Analyses

Given these various factors that can affect voter evaluations of poll workers, it is important that we do a multivariate analysis to determine which factors do affect poll worker evaluations, controlling for other factors. In order to accomplish this, we ran an ordered logit in Stata because the dependent variable—the evaluation of the poll worker—is an ordered

variable where a value of 1 equals poor, 2 equals fair, 3 equals good, and 4 equals excellent. Because the data are a set of state samples, the model was run using robust standard errors. In order to improve our ability to interpret the results of the ordered logistic regression, we used CLARIFY (King, Tomz, and Wittenberg 2000). The logistic regression coefficients for each question were transformed into first differences and these results are presented as well. These values indicate how a change in a specific attribute will alter the probability of a voter being in each category, holding the other attributes at the median response.

Tables 6 and 7 show the results of the ordered logistic regressions for election day and early voting, respectively, where the dependent variable is the voter evaluation of the poll worker. The dependent variables are all binary with the exception of age, which is continuous. The regressions show that there are certain similarities between the election day and early voting experience as it pertains to poll worker evaluations. Five variables are significant in both models and in the same direction. Age and knowing the poll worker are positively related to a higher poll worker evaluation. Having a problem at the polls, being in a polling place with a long line, and the oldest poll workers are related to lower poll worker evaluations. In addition, White voters who have a White poll worker also rate poll workers higher.

[Tables 6 and 7 about here]

There are also important differences between the two models. First-time voters who voted on election day rated poll workers who they interacted with negatively compared to experienced voters; this dynamic does not exist in the early voting model. African American voters who had an African American poll worker rated the experience higher in election day voting but did not do so in early voting. Younger poll workers were also given a higher

evaluation in early voting, which is not the case in election day voting. Finally, Obama voters were less likely to rate poll workers highly in early voting.

If we look at the first differences in Table 8, we see that—in the election day voting model—having a problem at the polls, having an old poll worker, and having a long line most strongly reduce the likelihood of a voter rating the poll worker excellent. Being a first time voter also reduces a voter’s evaluation of precinct election officials. By contrast, knowing your poll worker, having an African American poll worker if you are an African American Voter, and getting help if you need it are most likely to make a voter rate the poll worker excellent. We also see that most of the change occurs on the right two columns of the table; there are not large increases for most values in the “fair” or “poor” categories.

[Table 8 about here]

Turning now to Table 9, we see that—in the early voting model—having a problem at the polls, having an old poll worker, and having a long line again most strongly reduce the likelihood of a voter rating the poll worker excellent. Oddly, voting for Obama also is related to a lower poll worker evaluation in the early voting model. Knowing your poll worker again results in a higher likelihood of rating a poll worker excellent and having a young poll worker results in a higher poll worker evaluation. With the exception of having a problem voting, we again see that most of the change occurs on the right two columns of the table; there are not large increases for most values in the “fair” or “poor” categories.

Conclusions

Poll workers are the street level bureaucrats of elections. They implement election laws for those voters who vote in person and establish the overall environment for the voting

experience, be it by putting up signage or managing the lines at the polls. The poll worker is the public face of the election and for election officials, giving voters a positive experience is important for a variety of reasons. First, it is a sign of good management on the part of the election officials, signaling that they take this aspect of their job seriously and recognize that there is a customer service aspect to voting (see Price and Aronould 1995; . Second, having a good experience has been shown to increase overall voter confidence in the electoral process.

As the data presented here show, voters are responsive to these environmental factors. Voters who have a problem at the polls—they have trouble finding it, have a voting machine or voter registration problem, or feel intimidated—rate their poll workers much lower than those who do not have problems. Voters who wait in long lines also rate their poll workers lower. Knowing your poll worker—which only happens approximately 19% of the time with election day voting and 9% of the time in early voting—improves a voter’s evaluation of the poll workers.

There are also important differences between early and election day voting. First, first-time voters rated the election day voting experience much lower than they did the early voting experience. Second, the race interactions were more important in the election day voting than in early voting. African Americans who had a black poll worker evaluated the election day experience higher than the same combination in early voting and the gap between the African American-African American voter-poll worker combination and the African-American-White combination is markedly larger in election day voting when compared to early voting. The same is the case for the White voter-White poll worker versus White voter-Black poll worker combination.

Bibliography

- Alvarez, R. Michael, Lonna Atkeson, Lisa Bryant, Thad E. Hall, and Kyle Saunders. 2008. "New Barriers to Participation: Application of New Mexico's Voter Identification Law." Working Paper.
- Alvarez, R. Michael and Thad E. Hall. 2006. "Controlling Democracy: The Principal-agent Problems in Election Administration." *Policy Studies Journal*. 2006. 34, 4: 491-510.
- Alvarez, R. Michael, Thad E. Hall, and Morgan Llewellyn. 2006. "Are Americans Confident Their Ballots Are Counted." Caltech/MIT Voting Technology Working Paper.
- Atkeson, Lonna and Kyle Saunders. 2007. Election Administration and Voter Confidence: A Local Matter. Manuscript University of New Mexico.
- Atkeson, Lonna Rae, R. Michael Alvarez, Lisa Bryant, Thad E. Hall, and Kyle Saunders. 2007. "New Barriers to Participation: Application of New Mexico's Voter Identification Law." Manuscript. University of New Mexico.
- Barreto, Mara A., Matt Marks, and Nathan Woods. 2004. Precinct quality and voter turnout: Race, income, and voter participation. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago.
- Claassen, Ryan L., David B. Magleby, J. Quin Monson, and Kelly D. Patterson 2008. "At Your Service": Voter Evaluations of Poll Worker Performance. *American Politics Research*. 36: 612 - 634.
- Cobb, Kim and Hedges, Michael. 2004. Large voter turnout jams polls. Houston Chronicle, November 3.

- Hall, Thad E., Quin Monson, Kelly Patterson. Forthcoming. "The Human Dimension of Elections: How Poll Workers Shape Public Confidence in Elections." *Political Research Quarterly*.
- Hall, Thad E., Quin Monson, Kelly Patterson. 2007. "Poll Workers in American Democracy: An Early Assessment." 2007. *P.S.: Political Science and Politics*. 40, 4: 647-654. With J. Quin Monson, and Kelly D. Patterson.
- Lipsky, Michael. 1980. Street level bureaucracy. New York: Russell Sage Foundation.
- Levitan, David M. 1946. "The Responsibility of Administrative Officials in a Democratic Society." *Political Science Quarterly*. 61 (December), 562-598.
- Price, Linda L. and Eric J. Aronould. 1995. Consumers' emotional responses to service encounters: The influence of the service provider. *International Journal of Service Industry Management* 6: 34-63.
- Prottas, Jeffrey. M. 1978. The power of the street-level bureaucrat in public service bureaucracies. *Urban Affairs Quarterly* 13:285-312.
- Prottas, Jeffrey. M. 1979. People-processing. Lexington, MA: Lexington Books.
- Sacramento Bee. 2004. Election chaos: Is California the next Florida? March 11.
- Selden, Sally Coleman. 1997. *The Promise of Representative Bureaucracy: Diversity and Responsiveness in an Government Agency*. Armonk: NY: M.E. Sharpe.
- Sowa, Jessica E., and Sally Coleman Selden. 2003. Administrative discretion and active representation: An expansion of the theory of representative bureaucracy. *Public Administration Review* 63:700-710.

Table 1: Poll Worker Evaluations by Voter Demographics

Election Day Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Gender	Male	0.79%	3.22%	26.46%	69.53%
	Female	0.55%	3.73%	25.94%	69.78%
Disabled Voter	Able Bodied	0.64%	3.45%	26.62%	69.30%
	Disabled	0.70%	3.84%	23.60%	71.86%
Education	HS or less	0.65%	3.38%	25.99%	69.98%
	Some College	0.65%	3.89%	25.69%	69.78%
	College Grad +	0.64%	3.24%	26.99%	69.13%
Race	White	0.56%	3.06%	25.19%	71.20%
	Black	1.70%	3.77%	30.57%	63.96%
	Other	0.63%	7.77%	31.93%	59.66%
Age	Under 30	0.35%	6.56%	34.52%	58.57%
	31-50	0.83%	4.13%	28.21%	66.82%
	51-70	0.61%	2.08%	22.28%	75.03%
	70 plus	0.32%	1.26%	18.30%	80.13%
First Time Voter	Voted Before	0.67%	3.31%	25.27%	70.74%
	First Time Voter	0.26%	6.14%	39.13%	54.48%
Early Voting					
Gender	Male	0.84%	2.75%	26.88%	69.53%
	Female	0.51%	3.69%	24.55%	71.25%
Disabled Voter	Able Bodied	0.66%	2.91%	25.93%	70.50%
	Disabled	0.81%	4.86%	24.70%	69.64%
Education	HS or less	0.73%	3.09%	25.27%	70.91%
	Some College	0.95%	2.67%	27.05%	69.33%
	College Grad +	0.36%	3.83%	25.00%	70.80%
Race	White	0.79%	3.07%	24.06%	72.09%
	Black	0.00%	3.43%	34.86%	61.71%
	Other	1.12%	3.93%	29.21%	65.73%
Age	Under 30	2.24%	2.24%	36.77%	58.74%
	31-50	0.58%	3.84%	27.64%	67.95%
	51-70	0.39%	3.41%	22.05%	74.15%
	70 plus	0.00%	0.87%	20.00%	79.13%
First Time Voter	Voted Before	0.66%	2.99%	25.58%	70.76%
	First Time Voter	1.71%	5.98%	28.21%	64.10%

Table 2: Poll Worker Evaluations by Poll Worker Demographics

Election Day Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Poll Worker Race (Reported)	Black	1.24%	4.95%	29.26%	64.55%
	White	0.54%	3.06%	25.11%	71.29%
	Other	1.22%	5.71%	25.31%	67.76%
Poll Worker Age (Reported)	Under 30	2.01%	3.34%	32.44%	62.21%
	31-50	0.41%	3.11%	26.72%	69.76%
	51-70	0.52%	3.37%	24.41%	71.70%
	70 plus	1.81%	6.46%	34.88%	56.85%
Knew Poll Worker	Did Not Know Poll Worker	0.72%	4.04%	29.04%	66.20%
	Knew Poll Worker	0.34%	1.03%	14.00%	84.62%
Election Day Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Poll Worker Race (Reported)	Black	0.54%	5.95%	24.32%	69.19%
	White	0.80%	2.68%	25.29%	71.22%
	Other	0.81%	4.03%	25.81%	69.35%
Poll Worker Age (Reported)	Under 30	0.98%	2.94%	17.65%	78.43%
	31-50	0.56%	2.65%	25.14%	71.65%
	51-70	0.93%	3.59%	26.20%	69.28%
	70 plus	0.00%	8.70%	36.96%	54.35%
Knew Poll Worker	Did Not Know Poll Worker	0.75%	3.27%	27.18%	68.80%
	Knew Poll Worker	0.00%	2.74%	11.64%	85.62%

Table 3: Poll Worker Evaluation – Race Interactions

Election Day Voting				
	Poll Worker Performance			
	Poor	Fair	Good	Excellent
Black Voter - Black Poll Worker	1.49%	3.73%	23.88%	70.90%
Black Voter - White Poll Worker	1.95%	3.90%	41.46%	52.68%
White Voter - White Poll Worker	0.46%	2.63%	24.11%	72.80%
White Voter - Black Poll Worker	1.14%	5.68%	32.10%	61.08%
Early Voting				
	Poll Worker Performance			
	Poor	Fair	Good	Excellent
Black Voter - Black Poll Worker	0.00%	4.62%	30.77%	64.62%
Black Voter - White Poll Worker	0.00%	2.60%	38.96%	58.44%
White Voter - White Poll Worker	0.84%	2.43%	23.63%	73.10%
White Voter - Black Poll Worker	0.95%	5.71%	20.95%	72.38%

Table 4: Poll Worker Evaluations by Experience at Polls

Election Day Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Length of Lines	Less than 30 minute Line	0.42%	3.11%	24.90%	71.58%
	Longer than 30 minute Line	2.38%	6.35%	34.79%	56.48%
Had Problem	Had Problem	6.90%	11.13%	35.38%	46.59%
	Did Not Have Problem	0.35%	3.10%	25.76%	70.78%
Voter Needed Help	No	0.68%	3.50%	26.49%	69.33%
	Yes	0.00%	3.48%	20.89%	75.63%
Election Day Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Length of Lines	Less than 30 minute Line	0.53%	2.42%	24.00%	73.06%
	Longer than 30 minute Line	1.34%	7.05%	33.56%	58.05%
Had Problem	Had Problem	7.63%	15.05%	34.34%	42.99%
	Did Not Have Problem	0.34%	2.57%	25.29%	71.80%
Voter Needed Help	No	0.74%	3.30%	26.09%	69.87%
	Yes	0.00%	2.22%	22.22%	75.56%

Table 5: Poll Worker Evaluations by Partisan and Political Factors

Election Day Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Vote Choice	McCain	0.62%	3.37%	24.63%	71.38%
	Obama	0.63%	3.44%	27.68%	68.25%
	Other	2.47%	9.88%	32.10%	55.56%
Party Identification	Democrat	0.75%	3.31%	26.64%	69.31%
	Republican	0.62%	3.31%	24.61%	71.46%
	Independent	0.49%	3.92%	27.13%	68.46%
Ideology	Very liberal	0.48%	3.37%	24.82%	71.33%
	Liberal	0.84%	2.72%	28.77%	67.68%
	Moderate	0.79%	3.34%	27.22%	68.64%
	Conservative	0.59%	3.54%	25.61%	70.27%
	Very Conservative	0.33%	3.98%	23.31%	72.38%
Early Voting					
		Poll Worker Performance			
		Poor	Fair	Good	Excellent
Vote Choice	McCain	0.16%	3.13%	24.10%	72.61%
	Obama	0.94%	3.23%	26.67%	69.17%
	Other	5.88%	0.00%	47.06%	47.06%
Party Identification	Democrat	0.69%	3.44%	24.24%	71.63%
	Republican	0.84%	2.95%	26.16%	70.04%
	Independent	0.51%	3.30%	26.65%	69.54%
Ideology	Very liberal	1.22%	4.88%	23.78%	70.12%
	Liberal	0.88%	2.06%	28.24%	68.82%
	Moderate	1.24%	3.11%	25.67%	69.98%
	Conservative	0.28%	3.42%	24.50%	71.79%
	Very Conservative	0.00%	4.29%	24.29%	71.43%

Table 6: Election Day Voters Evaluation of Poll Workers

	Coefficient	Standard Error
Female	0.13	0.06
Black	-0.32	0.21
Other	-0.14	0.16
Age	0.02	0.00
First Time Voter	-0.26	0.14
Ed: HS or Less	0.01	0.07
Ed: Some College	-0.03	0.08
<i>Poll Worker Black</i>	<i>-0.29</i>	<i>0.17</i>
Poll Worker >30	-0.12	0.19
Poll Worker 31-50	0.07	0.08
Poll Worker <70	-0.79	0.11
Knew Poll Worker	0.91	0.08
Long Line (30+ min)	-0.48	0.11
Had Voting Problem	-1.12	0.15
Needed Help	0.52	0.16
Voted For Obama	-0.03	0.11
Democrat	0.07	0.09
Republican	0.03	0.09
Black Voter - Black Poll Worker	0.73	0.29
<i>White Voter - White Poll Worker</i>	<i>0.22</i>	<i>0.12</i>
_cut1	-4.24	0.25
_cut2	-2.40	0.20
_cut3	0.12	0.19
Number of obs	=	5602
Wald chi2(20)	=	762.35
Prob > chi2	=	0

Table 7: Early Voter Evaluation of Poll Workers

	Coefficient	Standard Error
Female	0.18	0.13
Black	-0.16	0.23
Other	0.01	0.19
Age	0.01	0.01
First Time Voter	0.06	0.34
Ed: HS or Less	-0.08	0.13
Ed: Some College	-0.02	0.14
Poll Worker Black	0.28	0.21
Poll Worker >30	0.57	0.27
Poll Worker 31-50	0.16	0.14
Poll Worker <70	-0.81	0.30
Knew Poll Worker	0.70	0.20
Long Line (30+ min)	-0.74	0.14
Had Voting Problem	-1.54	0.24
Needed Help	0.33	0.28
Voted For Obama	-0.40	0.19
<i>Democrat</i>	<i>0.24</i>	<i>0.14</i>
Republican	-0.26	0.21
Black Voter - Black Poll Worker	-0.34	0.35
<i>White Voter - White Poll Worker</i>	<i>0.30</i>	<i>0.16</i>
_cut1	-4.91	0.53
_cut2	-2.86	0.36
_cut3	-0.41	0.32
Number of obs	=	1558
Wald chi2(20)	=	274.01
Prob > chi2	=	0

Table 8: Election Day Voters – First Differences

	Poor	Fair	Good	Excellent
Female	-0.06%	-0.32%	-2.28%	2.66%
Black	0.13%	0.88%	5.69%	-6.75%
First Time Voter	0.14%	0.68%	4.62%	-5.44%
Ed: HS or Less	0.00%	-0.02%	-0.17%	0.20%
Ed: Some College	0.01%	0.05%	0.40%	-0.47%
Poll Worker Black	0.16%	0.78%	5.16%	-6.10%
Poll Worker >30	0.07%	0.32%	2.19%	-2.58%
Poll Worker 31-50	-0.03%	-0.16%	-1.20%	1.39%
Poll Worker <70	0.53%	2.57%	14.54%	-17.63%
Knew Poll Worker	-0.26%	-1.33%	-11.85%	13.45%
Long Line (30+ min)	0.27%	1.34%	8.63%	-10.25%
Had Voting Problem	0.92%	4.30%	20.56%	-25.78%
Needed Help	-0.18%	-0.89%	-7.48%	8.54%
Voted For Obama	0.02%	0.08%	0.57%	-0.67%
Democrat	-0.03%	-0.16%	-1.21%	1.40%
Republican	-0.01%	-0.07%	-0.52%	0.59%
Black Voter - Black Poll Worker	-0.22%	-1.11%	-9.75%	11.07%
<i>White Voter - White Poll Worker</i>	-0.11%	-0.54%	-3.78%	4.43%

Items in bold significant at 0.05 level

Items in italics significant at 0.10 level

Table 9: Early Voters – First Differences

	Poor	Fair	Good	Excellent
Female	-0.07%	-0.45%	-2.89%	3.40%
Black	0.08%	0.57%	2.85%	-3.50%
First Time Voter	0.04%	0.09%	-0.46%	0.33%
Ed: HS or Less	0.03%	0.17%	1.17%	-1.37%
Ed: Some College	0.02%	0.10%	0.42%	-0.55%
Poll Worker Black	-0.09%	-0.56%	-4.03%	4.68%
Poll Worker >30	-0.17%	-1.06%	-7.86%	9.08%
Poll Worker 31-50	-0.07%	-0.40%	-2.61%	3.08%
Poll Worker <70	0.56%	2.98%	14.46%	-18.00%
Knew Poll Worker	-0.22%	-1.25%	-9.50%	10.97%
Long Line (30+ min)	0.46%	2.56%	13.05%	-16.08%
Had Voting Problem	1.69%	8.14%	25.69%	-35.52%
Needed Help	-0.12%	-0.66%	-4.90%	5.69%
Voted For Obama	0.14%	0.79%	5.88%	-6.82%
<i>Democrat</i>	-0.10%	-0.56%	-3.89%	4.55%
Republican	0.13%	0.74%	4.42%	-5.29%
Black Voter - Black Poll Worker	0.22%	1.23%	6.24%	-7.69%
<i>White Voter - White Poll Worker</i>	-0.15%	-0.84%	-5.08%	6.07%

Items in bold significant at 0.05 level

Items in italics significant at 0.10 level